

The Automobile Speaks

It tells you what it is, what it requires and it asks to be treated fairly.

By Frederick C. Guerrlich.

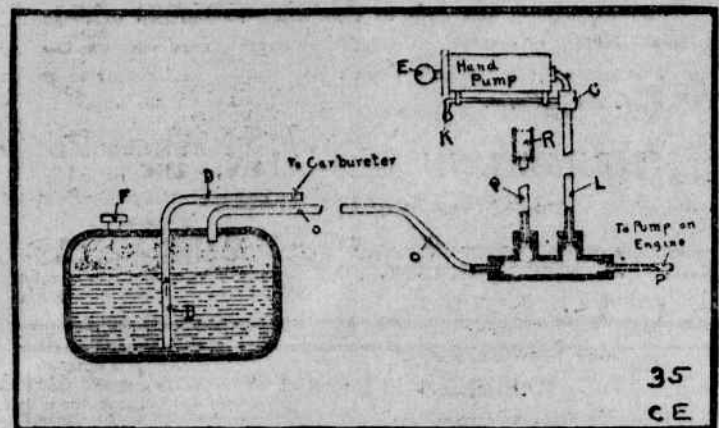
Number 35.

GASOLINE FEED SYSTEMS.

In the last talks we saw how the carburetor does its work. Let us now see how the gasoline reaches the carburetor.

There are two ways of placing the gasoline supply tank, namely, higher than the carburetor, as under the seat or cowl, or in the rear of the car, where it will be lower than the carburetor.

There is practically no problem in feeding the gasoline to the carburetor when the tank is higher than it, as the gasoline will simply flow to it by gravity. It is, however, often necessary to make the manifold very long, so as to get the carburetor low enough, thus increasing the tendency to condense. Sometimes when the car is going up a hill and when the tank is nearly empty the carburetor will get higher than the level of the gas in the tank, and of course the gas cannot get to the carburetor. This often happens,



and when it does the thing to do is to turn around and go up the hill backward.

Where the tank is placed in the rear, which is often done because of the convenience of filling and because of the better balance of the car which is obtained thereby, the level of the gasoline will be lower than the carburetor. There will, therefore, have to be some means furnished for forcing the gas up to this higher level.

This is done in two ways, namely, by the pressure feed system and by the vacuum system. The latter, however, is fast replacing the former.

The drawing shows the layout of a pressure feed system. If the tank "A" be made air tight and air then be forced into it under pressure the air will press down on every square inch of the surface of the liquid and so force the liquid to flow up through the pipe "D" and thus up to the carburetor.

Two methods are used to get the air pressure, namely, by a pump driven from the engine, usually from the cam shaft, or the fact that the exhaust gases of the engine still have a small amount of pressure is utilized. By screwing a pipe into the exhaust pipe a little of the gases can be used, they first being screened and passed through a regulator valve, which will keep the pressure in the tank always the same.

The pump used varies in design. In some cases the last valve lifter and its guide also act as the pump. The pump usually has a means for regulating the amount of air which it will pump.

When the engine has stood idle for a while the pressure will leak out of the tank, and so some method must be furnished to get the pressure in the tank for starting, as the engine driven pump will work only when the engine is running. For this purpose a hand pump is furnished, it being placed in some position convenient to the driver, as on the instrument board or the front board of the driver's seat.

This pump usually has a valve placed at its mouth, which valve can be turned so as to connect the pump to the piping to the tank—which would be its position when preparing to start or when pumping—it can be turned so as to disconnect the pump and the piping, or really shut off the piping from the pump—which would be the position when running—and it can be turned so as to let the pressure escape from the tank.

As it is desirable to know what pressure is in the tank a pressure gauge is usually connected to the piping and placed on the instrument board.

Let us go over the illustration and study the action. When it is desired to start the lever "K" is turned so that the pump valve is in the pumping position and then air is pumped by moving the handle "E" back and forth until the gauge reads two pounds. When there are two pounds pressure in the tank the engine can be started and the engine driven pump will then pump air into the tank to take the place of the gasoline which has gone to the carburetor.

Note that when pumping the air can go to the tank through the pipe "O" or to the gauge through the pipe "Q," and that the engine driven pump also is connected by the pipe "P" to both the tank and gauge.

The great fault with this system is that it is difficult to keep the air from leaking out, the filler cap "F" being the greatest place of leakage. This fault led to the invention of the vacuum system, which is now used on most cars.

TWO SHOWROOMS FOR SALE OF NASH CARS

Unlike Gopher Prairie, which has only one Main street, Greater New York now can boast of two distinct automobile rows, one above and one below Columbus Circle.

Taking cognizance of this fact and wishing to afford the public with additional facilities for the inspection of the new Nash models, the Warren-Nash Motor Corporation, Nash distributor for the metropolitan district, now has

established showrooms in each section through the appointment of the Porter-Lafayette Company as a Nash dealer for Manhattan.

This appointment gives the Warren-Nash Motor Corporation, with upper Broadway headquarters at Sixty-fourth street, representation as well below Columbus Circle, since the showrooms of the Porter-Lafayette Company's showrooms, at Broadway and Fifty-seventh street, are in the very heart of the automobile shopping district, within easy walking distance of Times Square and close by the headquarters of those cars with the same price appeal as the Nash.

ANNOUNCEMENT

NEW SUPERIOR MITCHELL F 50 MOTOR

BUILT THE SAME AS THE MOTOR FOR A \$5000.00 CAR AND BEING USED IN THE MITCHELL WHICH SELLS FOR \$1490.00 F.O.B. FACTORY

BEING EXHIBITED FOR THE FIRST TIME A Demonstration will Convince You

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COLUMBUS CIRCLE, FACINO SOUTH
Telephone Columbus-8000

NEWARK, N.J. PASSAIC, N.J.
Foley Motor Car Co. L.W. Ward & Co.

BIG USED CAR SHOW 12TH REGT. ARMORY

More Than Forty Dealers Will Have All Models on Exhibit.

Automobile dealers some years ago began to recognize the fact that the problem of selling used cars was not alone one of price but one of reconstruction, and for this reason they evolved what might be termed the "remanufactured car." This policy of rebuilding the used cars they offered for sale means that prospective buyers of used cars can at the present time obtain bargains from the reputable dealers of New York City who constitute the Automobile Dealers Association, Inc. That the dealers believe in "reconstructed cars" is shown by the fact that they are going to hold New York's first used car show during the week of November 21 at the Twelfth Infantry Armory at Columbus avenue and Sixty-first street.

This policy of having the dealer or distributor stand behind the car he is selling has proved of advantage to the prospective buyer. No longer should one shop about with the conviction one must examine every part of a car. In the old days many a man went into a used car dealer's place with a long slip in his hand on which he checked off each part of the car as he went over it; even then, many found they had bought no bargain. Now it is possible to buy a standard car of a reputable dealer and obtain a ninety day guarantee. This improvement is, in part, due to the fact the dealers discovered that in many cases a man who bought a used car of a certain make from some unattached and irresponsible seller would never consider a car of a similar make when he was in the market for a new car. Therefore the dealers belonging to the Automobile Dealers Association, Inc., of New York, became their own used car salesman and see that used cars are placed upon the market in good condition.

It is advisable, if possible, to buy the make of used car wanted from the reputable dealer who handles new models or the same make, for during the fall and winter the mechanics in his service station recondition used cars.

STUDEBAKER MAKES EXCEPTIONAL 'DRY RUN'

A Studebaker sedan in which Olds—a very fine type of oil—had been used for 3,000 miles, was driven for 16.8 miles yesterday under the observation of the automobile editor with all the oil drained off. At the end of this so-called "dry run" there was no indication of engine heating.

The secret is that this oil forms a graphoid surface on the cylinder walls and bearings and makes such a remarkable demonstration possible.

Several prominent engineers and service experts made the run in other cars and kept interested eyes on the Studebaker while it ran smoothly with nothing but the graphoid surface to keep it from overheating.

KING 8 HAS SPECIAL EXHIBIT ON THE ROW

One of the attractions that created a great deal of comment during the closed car show the past week was the exhibit of the King Automobile Company. Of chief interest in this exhibit was the new eight cylinder coupe, which is an exceptionally roomy car. A feature of this car is a commodious compartment for the carrying of packages installed in back of the driver's seat. The sedan also attracted much attention.

The general manager of the company, Frank Post, announces a continuation of the exhibit at the Broadway salesrooms, 1902 Broadway, where the complete line will be shown.

SCHMUNK RESIGNS FROM PEERLESS CO.

After fourteen years of continuous service through several changes of administration, R. J. Schmunk resigns his position as general sales manager of the Peerless Motor Car Company, effective with the end of the year.

Asked about his plans for the future, the genial "Boss" said: "This is the first opportunity I have had in many years to lay aside business cares and permit myself the luxury of a little pure unadulterated recreation. I have hardly had time to make definite plans, but my friends who are interested in what I may do need not be surprised if I leave a California address which will find me during the coming winter months."

FOREIGN CARS WILL VIE WITH AMERICA'S

Automobile Salon in Commodore Will Be Finest Ever Held.

With an international participation hardly second to the armament conference the seventeenth annual Automobile Salon will open next Sunday evening at the Commodore Hotel. A large group of high grade American cars will vie with automobiles from five European nations, not alone in presenting individual merit, but also in an ensemble presentation of all that is new and fashionable among the world's leading motor cars.

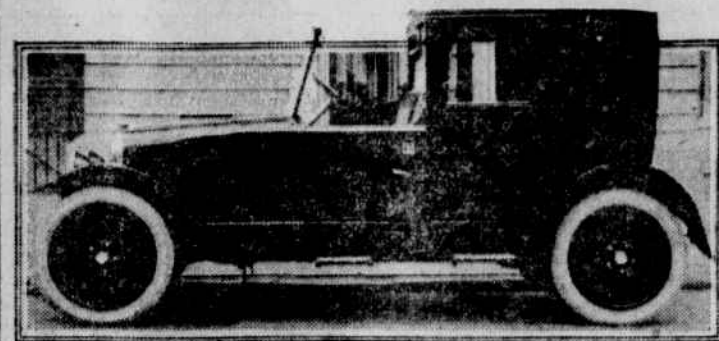
Many of the foreign cars to be exhibited are coming directly from the three great European exhibitions held this fall—the Berlin Automobile Show, the Paris Salon and the London Olympia. The last named has just ended and these cars are now on the way across the Atlantic. The international rivalry will extend to the custom bodies, as creations of several famous European carrozzeries will be found on the special show cars from abroad, while the latest designs of a score of American custom coach builders, thirteen of whom have their own special exhibits, will be found on both American and foreign chassis.

That the Italian automobile industry is progressing is indicated by the exhibits of four famous cars—Fiat, Isotta Fraschini, Lancia and Spina—all showing new models and in one case at least a revolutionary departure in motor design. The Rolls-Royce, Lancheester and Sunbeam are a worthy trio in presenting the best of Britain's automobile production, while the Belgian Minerva comes with added prestige due to victories in stock car competitions abroad during the past season. Interesting exhibits of the new models of Mercedes and Benz, both names famous in the history of the sport in this country as well as abroad, mark the entry into the American market of the two leading cars of Germany.

The Hispano Suiza, one of the highest priced cars of France, will make its Salon debut.

Alongside these ten European aristocrats will be exhibited twice that number of America's highest priced automobiles, and they will lack nothing in comparison.

Dodge Bros. Brougham



The new Dodge Bros. brougham is making a decided hit in New York. It received a lot of attention at the recent closed car show. This striking model in one stroke gives the Stratton-Bliss Company of 1847 Broadway a "big car" for its great metropolitan clientele. It is a beautiful, comfortable car, with the latest appointments.

CLOSED CAR EXHIBIT A GOOD SELLING SHOW

The Closed Car Show that came to a conclusion in the Twelfth Regiment Armory Saturday night was a great success and should be made an annual affair, according to Harry S. Haupt, the Hudson and Essex distributor.

"The show was not only a good one from the selling point of view," said Mr. Haupt, "but was of incalculable value in stimulating interest among prospective customers."

"We sold a number of Essex cars, and I know many of the other dealers did a fine business during the week."

"While the show was not as crowded as some of the national shows in the Palace, there was a fine attendance all week, and unlike the Palace show the salesmen were able to give some personal attention to prospective customers, something which is almost impossible to do when there is a big crowd."

"The paid attendance was far ahead of the most sanguine expectations, and I am sure the other members of the Automobile Dealers Association are as pleased as I am over the satisfactory result of the exhibition."

"This week we are concentrating our efforts on a used car show, where the public will find many real bargains in rebuilt cars, guaranteed by reputable dealers who have been compelled to sacrifice profits in order to make room for new cars."

EARL MOTORS, INC., TAKES OVER BRISCOE

New Car Will Be Called 'Earl' and Big Plans Developed.

Clarence A. Earl, president of Earl Motors, Inc., has completed a deal whereby the Jackson Metal Products Company, Jackson, Mich., will be taken over by Earl Motors, Inc., and operated as one of the manufacturing units of Earl Motors, Inc.

The Jackson Metal Products Company has extensive manufacturing facilities for the production of fenders, running board aprons, gasoline tanks, crumpling work, radiator shells, front aprons, dust pans, and other miscellaneous types of sheet metal work.

The transaction is one of the largest which has taken place in Jackson in some little time, and represents about \$200,000. The deal will mean the employment of more than two hundred men when the plant is operating on a normal basis, which, with the introduction of the new Earl car should be about the first of the year.

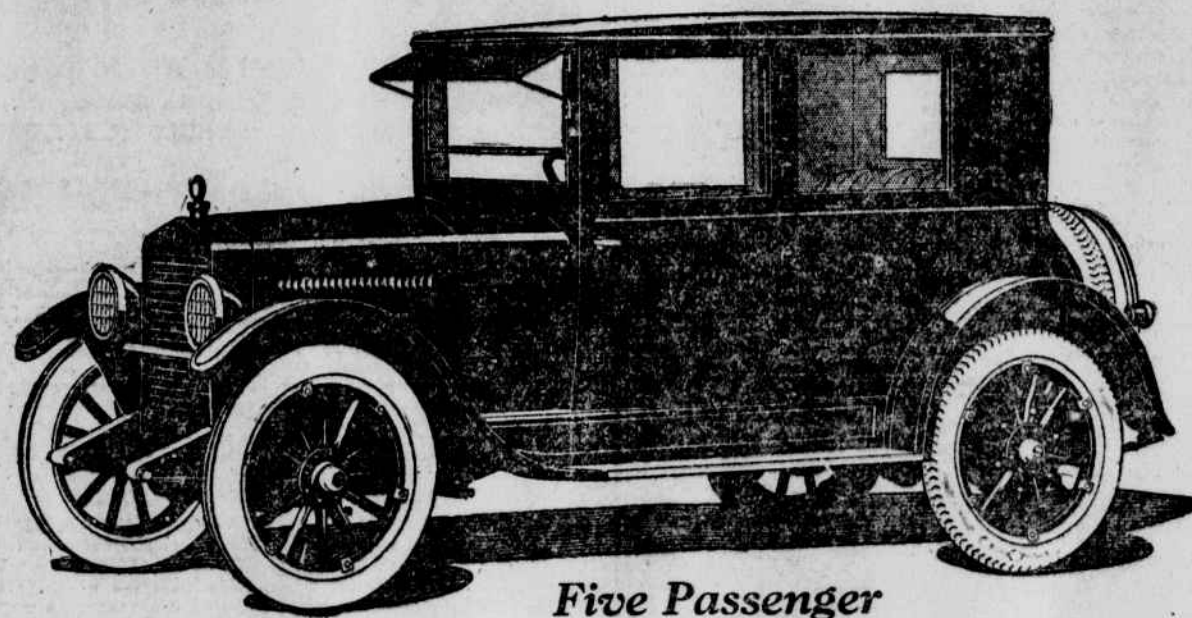
The directors of the Jackson Metal Products Company were John Stern, president; Louis M. La Duke, secretary and treasurer; and Forrest C. Badgley.

The new directors of the company will be Clarence A. Earl, president; John Fletcher, vice-president and treasurer; and L. E. Latta, secretary. The officers are as follows: Clarence A. Earl, president; John Fletcher, vice-president and treasurer; Kelly R. Jacoby, vice-president in charge of sales; W. B. Jameson, vice-president in charge of production; Walter J. Mery, controller; Le Roy C. Allen, assistant treasurer; L. E. Latta, secretary; and George L. Duke, superintendent in charge of the plant.

The Hit of the Closed Car Show

The Essex Coach \$1495

F. O. B. Detroit



Five Passenger

A New Type Car For All Seasons

You will like the Essex Coach we now show for the first time. You will like its good looks, its utility, fine quality and attractive price.

It fulfills the requirement of business and professional men with economy and satisfaction.

And it also is amply large to meet the family need in both city and country service.

Essex developed the Coach to meet your wants. Now you can get a fine closed car for a trifle more than you pay for an open car.

The performance is the same as that of the open models. It will gratify your demands in utility and reliability.

You Will Enjoy Driving It

There is much about the Essex Coach that will appeal to you beside its attractive appearance. All controls are easy to reach and easy to operate. Clutch and brake pedals re-

quire hardly more than a touch. You will like its response to wheel and throttle.

It is fleet and nimble. It rides easily over rough roads and may be driven in the country the same as an open car.

It is easily turned and parked in narrow spaces. Very little attention is required to keep it in prime condition.

Will Give You Long Service

Both the chassis and body are built to give long service without annoyance or expense. An unusually sturdy frame and the manner of body construction practically eliminates squeaks and rattles. Doors are hung on four hinges and rest on fittings that keep them tight and solid.

The Chassis is the New and Improved Essex, which everyone knows so well for its reliability and endurance.

You will be delighted with the Essex Coach. You cannot ignore its price.

Has These Fine Car Details

- Dash controlled ventilator.
- Wind and rainproof windshield.
- Sun visor.
- Luggage and tool locker, opened from rear.
- Newest type easy operating crankhandle lifts on door windows.
- Four hinges on each door and fittings that hold doors solid—very important.
- Fine texture, long wearing upholstery and rugs.
- Low, deep-cushioned seats for five.
- Radiator shutters and motor for efficient motor control.
- Cord tires.

Come See the Coach—You Will Like It

HUDSON MOTOR CAR COMPANY OF NEW YORK, Inc.

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Opposite Main Entrance AT

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Oldsmobile NEW 1922 LINE NOW HERE!

The Sensation Of The Show! Finest closed cars we have seen at the price. Compare them with others selling at \$500 to \$700 higher—which suits you.

SEDANS COUPES TOURINGS SPORTSTERS ROADSTERS

Prices from \$1145. Tourings; Roadsters \$1645. Coupes; Sedans

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